

## **QA7 – Supplementation of Premature Infant Formulas**

### **QUESTION:**

With the nutrient dense premature formulas available, what is the common practice regarding vitamin/mineral supplementation for premature infants either formula fed or breast fed? Recent infants transferred from large tertiary hospitals have been receiving LBW vitamins while on premature formulas. Please clarify standards in practice re vitamin/mineral supplementation. What specific minerals, such as calcium and phosphorus, are commonly being supplemented in addition to vitamins for breast fed infants?

### **ANSWER:**

The need for vitamin/mineral supplementation of any infant is dependent on the vitamin/mineral content of the feeding, the daily intake of the infant and estimated needs. Premature formulas and premature human milk fortifiers are not all alike; therefore, the supplementation needs differ.

Premature infants <2kg are fed a mineral enriched feeding (premature formula or human milk fortifier) and in general do not require a mineral supplement. Premature formulas should also meet the mineral needs of these infant.

The vitamin content of premature formula and human milk fortifiers are not all alike. The Vitamin D and E content of the Ross products are lower than the Mead Johnson products. We supplement the Ross products with a Low Birth weight vitamin which contains ADC and E to bring the intake closer to 400 IU vitamin D and 12 IU vitamin E. The Mead Johnson products meet the low end of Vitamin E recommendations. Vitamin E may not be routinely supplemented for these infants, but some may need additional Vitamin E. Babies greater than 2kg on standard formula taking less than 24 oz need a multivitamin supplement to meet the RDA.

### References:

- 1) Nutritional Needs of Preterm Infants, R. Tsang, editor, 1993, Williams and Wilkins (consensus statement in appendix).
- 2) Zerzan, J, and O'Leary, M: Nutrition for Preterm and Low-Birthweight Infants. In: Nutrition in Infancy and Childhood, 6th ed., Trahms and Pipes, 1997, MCB/McGraw Hill.